

AMENDMENTS TO THE CLAIMS:

Please cancel Claims 1 through 3, 30, and 31 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 4 through 15, 29, 32 through 41, and 58 and add Claim 60 as follows:

1 - 3. (Cancelled)

4. (Currently Amended) A method according to claim 3 ~~60~~, wherein the entry node modifies the size of the synchronization second packet, so that the sum of the modified size of the preceding second packet and the modified size of the synchronization second packet is ~~substantially~~ equal to the normal size of a second packet.

5. (Currently Amended) A method according to claim 2 ~~60~~, wherein the entry node manages a mechanism, put into effect at each change in access level, for obtaining a current distance in memory, between a stored position of a forthcoming start of a first packet and a current position of a read pointer used for the construction of the second packets.

6. (Currently Amended) A method according to claim 5, wherein the entry node performs the following steps ~~steps comprising the following steps~~:

the entry node obtains said current distance;

if the current distance is equal to zero, the entry node generates and sends a synchronization second packet for which the start of the payload information corresponds

to the start of the payload information of a first packet associated with the new access level, this synchronization second packet comprising a synchronization marker;

if the current distance is smaller than the normal size of a second packet, the entry node generates and sends a truncated second packet, known as a preceding second packet, whose reduced size is equal to the current distance, and then generates and sends a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the new access level, this synchronization second packet comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of the second packet, the entry node sends a normal-sized second packet which is not a synchronization second packet.

7. (Currently Amended) A method according to claim 2 60, wherein, at each change in access level, the entry node also inserts an access level change marker into the synchronization second packet.

8. (Currently Amended) A method according to claim 1 60, wherein the ~~policy of~~ association of an access level with each first packet is based upon restriction on the use of the data stream and wherein the access level comprises use restriction information.

9. (Currently Amended) A method according to claim 1 60, wherein the ~~policy of~~ association of an access level with each first packet is based on the use of a plurality of time slots, and

wherein the entry node:

(a) obtains the time slot, among ~~said the~~ the plurality of time slots, that includes the instant of processing, by the entry node, of the given first packet; and

(b) associates one of the access levels with the first packet as a function of the time slot obtained.

10. (Currently Amended) A method according to claim 1 ~~60~~, wherein the ~~policy of associating association of~~ an access level with each first packet is based on the use of a plurality of pieces of control information that can be contained in the first packets, and wherein the entry node:

(a) obtains at least one piece of control information, from among ~~said the~~ plurality of pieces of control information, contained in a given first packet; and

(b) associates one of the access levels with the given first packet as a function of said at least one piece of control information obtained.

11. (Currently Amended) A method according to claim 8 ~~9~~, wherein the ~~policy of associating association of~~ an access level with each first packet is based on the use of ~~said the~~ plurality of time slots and said plurality of pieces of control information, and wherein the entry node:

(a) obtains the time slot, among ~~said the~~ plurality of time slots, that includes the instant of processing, by the entry node, of a given first packet;

(b) obtains at least one piece of control information, from among ~~said the~~ plurality of pieces of control information, contained in a given first packet; and

(c) associates one of the access levels with the given first packet as a function of the time slot obtained and said at least one piece of control information obtained.

12. (Currently Amended) A method according to claim 1 ~~60~~, wherein the data stream is transmitted by an entry terminal and wherein the entry terminal is a digital type of

terminal connected to the entry sub-network and directly generating the data stream in the form of first packets.

13. (Currently Amended) A method according to claim + 60, wherein the data stream is transmitted by an entry terminal and

wherein the entry terminal is an analog type terminal, connected to the entry sub-network by means of an independent adapter enabling the conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

14. (Currently Amended) A method according to claim + 60, wherein the data stream is transmitted by an entry terminal, and

wherein the entry terminal is an analog type terminal directly connected to the entry node, and

wherein the entry node integrates an adapter enabling the conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

15. (Currently Amended) A method according to claim + 60, wherein the data stream is transmitted by an entry terminal, and

wherein the entry terminal is integrated into the entry node and the entry node directly generates the data stream in the form of first packets.

16 - 28. (Cancelled)

29. (Currently Amended) An entry node for the insertion of broadcast control information for the control of the broadcasting of a data stream transmitted in a heterogeneous network, the heterogeneous network including at least one entry

sub-network conveying first packets and ~~said the~~ basic network conveying second packets, the entry node being connected to the basic network and to the entry sub-network, wherein the entry node comprises:

means for receiving first packets from the entry sub-network;

means for the association of an access level with each first packet from among a plurality of access levels; ~~as a function of~~ according to a predetermined policy of association;

means for the formation of each second packet by ~~enclosing at least a first packet or part of a first packet into said second packet; the first packets or part of the first packets enclosed within the second packet being associated with a same access level~~ including one or more first packet or parts of a first packet associated with a given access level in the second packet;

means for the insertion ~~into a field of~~ each second packet, ~~said field representing the of~~ broadcast control information ~~[[,]]~~ corresponding to the same access level; ~~associated with the at least first packet or part of a first packet enclosed within said second packet;~~ and

means for the detection of a change in access level between a first packet associated with a previous access level and another first packet associated with a new access level;

means configured to form a synchronization second packet by inserting a synchronization marker in a second packet;

means configured to reduce the size of the second packet preceding the synchronization second packet such that the start of the payload information of the synchronization second packet corresponds to the start of a first packet associated with the new access level; and

means for the transmission of second packets into the basic network.

30 - 31. (Cancelled)

32. (Currently Amended) An entry node according to claim 31 ~~29~~, comprising means configured to modify the size of the synchronization second packet, so that the sum of the modified size of the preceding second packet and the modified size of the synchronization second packet is ~~substantially~~ equal to the normal size of a second packet.

33. (Currently Amended) An entry node according to claim 30 ~~29~~, comprising means, activated at each change in access level, for the management of a mechanism to obtain a current distance in memory, between a stored position of a forthcoming start of a first packet and a current position of a read pointer used for the construction of the second packets.

34. (Currently Amended) An entry node according to claim 33, comprising means of selective activation as a function of the value of the current distance obtained, such that:

if the current distance is equal to zero, the activation means ~~activate~~ activates means for the generation and sending of a synchronization second packet for which the start of the payload information corresponds to the start of the payload information of a first packet associated with the new access level, this synchronization second packet comprising a synchronization marker;

if the current distance is smaller than the normal size of a second packet, the activation means ~~activate~~ activates means for the generation and sending of a truncated second packet, known as a preceding second packet, whose reduced size is equal to the current distance, and then means for the generation and sending of a synchronization second packet for which the start of the payload information corresponds to the start of the

payload information of a first packet associated with the new access level, this synchronization second packet comprising a synchronization marker; and

if the current distance is greater than or equal to the normal size of the second packet, the activation means ~~activate~~ activates means for the sending of a normal-sized second packet which is not a synchronization second packet.

35. (Currently Amended) An entry node according to claim 30 ~~29~~, comprising means for the insertion, at each change in access level, of an access level change marker into the synchronization second packet.

36. (Currently Amended) An entry node according to claim 29, wherein the policy of association of an access level with each first packet is based upon restriction on the use of the data stream, and

wherein the access level comprises use restriction information.

37. (Currently Amended) An entry node according to claim 29, wherein the policy of association of an access level with each first packet is based on the use of a plurality of time slots, and

wherein the entry node comprises:

(a) means for obtaining the time slot, among ~~said~~ the plurality of time slots, that includes the instant of processing, by the entry node, of the given first packet; and

(b) means for associating one of the access levels with the first packet as a function of the time slot obtained.

38. (Currently Amended) An entry node according to claim 29, wherein the policy of associating an access level with each first packet is based on the use of a plurality of pieces of control information that can be contained in the first packets, and

wherein the entry node comprises:

(a) means for obtaining at least one piece of control information, from among ~~said~~ the plurality of pieces of control information, contained in a given first packet; and

(b) means for associating one of the access levels with the given first packet as a function of said at least one piece of control information obtained.

39. (Currently Amended) An entry node according to claim 37, wherein the policy of associating an access level with each first packet is based on the use of ~~said~~ the plurality of time slots and ~~said~~ the plurality of pieces of control information, and

wherein the entry node comprises:

(a) means for obtaining the time slot, among ~~said~~ the plurality of time slots, that includes the instant of processing, by the entry node, of a given first packet;

(b) means for obtaining at least one piece of control information, from among ~~said~~ the plurality of pieces of control information, contained in a given first packet; and

(c) means for associating one of the access levels with the given first packet as a function of the time slot obtained and ~~said~~ the at least one piece of control information obtained.

40. (Currently Amended) An entry node according to claim 29, wherein the entry node is directly connected to ~~a~~ an entry terminal of analog type, which transmits the data stream, and

wherein the entry node integrates an adapter enabling the conversion, into first packets, of the data stream generated in the form of analog signals by the entry terminal.

41. (Currently Amended) An entry node according to claim 29, wherein the entry node comprises an entry terminal, which transmits the data stream₁ and wherein the entry node comprises means for the direct generation of the data stream in the form of first packets.

42. (Original) An entry node according to claim 29, wherein the heterogeneous network is a home audiovisual network.

43. (Original) An entry node according to claim 29, wherein the first packets are IEEE 1394 type packets.

44. (Original) An entry node according to claim 29, wherein the basic network is a switched network.

45 - 57. (Cancelled)

58. (Currently Amended) A storage ~~medium~~ means storing a computer program instructions for programming a programmable processing apparatus to become configured as an apparatus as set out in claim 29.

59. (Cancelled)

60. (New) A method for the insertion of broadcast control information for the control of the broadcasting of a data stream in a heterogeneous network, the heterogeneous network including at least one entry sub-network conveying first packets and a basic network conveying second packets, the entry sub-network being connected to the basic

network by an entry node configured to form the second packets from at least part of at least one first packet, wherein the entry node performs a method comprising the steps of:

receiving first packets from the entry sub-network;

associating an access level with each first packet from a plurality of access levels according to a predetermined policy;

forming each second packet by including one or more first packets or parts of a first packet associated with a given access level in the second packet, and inserting broadcast control information corresponding to the given access level into each second packet; and

transmitting the second packets formed in the forming step into the basic network,

wherein, if the access level changes between successive first packets of the data stream, the entry node (a) forms a synchronization second packet by inserting a synchronization marker in a second packet, and (b) reduces the size of the second packet preceding the synchronization second packet such that the start of the payload information of the synchronization second packet corresponds to the start of a first packet associated with the new access level.